It is prohibited to photocopy or circulate this document. Legal actions will be taken against those who violate this rule يُحظر تصوير أو تداول هذه الوثيقة، وسيتم اتخاذ الإجراءات القانونية اللازمة ضد من يخالف ذلك.

Academic Year العام الدراسي	2025/2026
Term الفصل	1
Subject المادة	Science/ Inspire العلوم/ إنسباير
Grade الصف	10
Stream المسار	General العام
Number of MCQ عدد الأسئلة الموضوعية	20
Marks of MCQ درجة الأسئلة الموضوعية	(2-4)
Number of FRQ عدد الأسئلة المقالية	4
Marks per FRQ الدرجات للأسئلة المقالية	10
Type of All Questions نوع كافة الأسئلة	MCQ/ الأسئلة الموضوعية FRQ/ الأسئلة المقالية
Maximum Overall Grade الدرجة القصوى الممكنة	100
Exam Duration - مدة الامتحان	150 minutes
Mode of Implementation - طريقة التطبيق	SwiftAssess & Paper-Based
Calculator الآلة الحاسبة	Allowed مسموحة

	Question* السؤال*	Lesson Name/Learning Outcome/Performance Criteria ** اسم الدرس/ نتائج التعلم/ مؤشر الأداء **	Reference(s) in the Student Book (English Version) المرجع في كتاب الطالب (النسخة الانجليزية) Example/Exercise مثال/تمرين	 Page الصفحة
MCQ - الأسئلة الموضوعية	1	Define force and identify the cause of all accelerations.	Figure 1	3
	2	Classify forces as either contact forces or field forces and realize that they result from interactions caused by agents.	Figure 1	4
	3	Interpret the graph of net force versus acceleration.	Figure 5	7
	4	Define inertia and state Newton's First law of motion (as a law of inertia).	Student Textbook	11
	5	Define equilibrium. State the conditions for an object to be in equilibrium.	Figure 9	12
	6	Define an object's weight. Relate the mass of an object to it's weight.	Student Textbook	13
	7	Calculate the weight of an object.	EXAMPLE Problem 3	14
	8	Describe forces in nature as a type of interaction between two bodies. State and explain Newton's third law of motion.	Student Textbook	19
	9	Apply the mathematical representation of Newton's Third Law in numerical problems. List the characteristics of the interaction pair and identify the action-reaction pairs for different situations. Define the tension force and explain how Newton's Third Law applies to forces on strings and ropes.	Figure 15 Figure 17	20 22
	10	Distinguish between static and kinetic friction. Identify the factors that friction force depends on.	Figure 10	38
	11	Define the coefficients of kinetic and static friction.	Student Textbook	39 & 40
	12	Relate graphically the frictional force to the normal force and find the coefficient of kinetic Friction.	Figure 12	39
	13	Identify work as a scalar quantity measured in Nm or Joule (J).	Student Textbook	55
	14	Show that work is done when a force is applied through a displacement.	Student Textbook	56
	15	Explain that the work done by a force acting in a direction perpendicular to the direction of motion is zero. Explain that work done by a force is positive when the force acts in the direction of motion and negative when the force acts in the opposite direction of motion with suitable examples.	Figure 2	56
	16	Define power and specify its unit (Watt).	Student Textbook	63
	17	Define periodic motion and the quantities associated with it like period and amplitude. Define the simple harmonic motion.	Student Textbook	98
	18	Differentiate between transverse, longitudinal and surface waves with examples.	Figure 6	104
	19	Describe the wave properties like amplitude, energy of a wave, wavelength, speed, phase, period and frequency.	Student Textbook	105
	20	Relate the period of a wave to its frequency.	Student Textbook	106 &107
FRQ - الأسئلة المقالية	1	Explain that a net force applied to an object causes the object to accelerate. Combine forces to find the net force acting on an object. Relate the direction of the acceleration to the direction of the net force. Apply Newton's Second Law to solve numerical problems.	Student Textbook Figure 4	6 - 14 6
	2	Apply the relationships that relate the normal force to maximum static friction and to kinetic friction to calculate unknown parameters like friction force, coefficient of friction or the normal force. Solve problems related to friction.	Student Textbook EXAMPLE Problem 3	38-40 41
	3	Apply the relationship between a force F (acting in same or opposite direction of motion) and the work done on a system by the force when the system undergoes a displacement d: W = Fd. Apply the relationship between power, the work done by a force, and the time interval in which that work is done (P=W/t). Draw the free body diagram showing the forces acting on an object (represented by a dot)	Student Textbook Student Textbook	55-57 63
	4	Define periodic motion and the quantities associated with it like period, wave length and amplitude. Relate the period of a wave to its frequency. Relate the wavelength of a wave to its speed and frequency in a medium. Use the wave equation to solve related numerical problems.	Student Textbook Student Textbook Figure 10	98 104-107 107

* Questions might appear in a different order in the actual exam, or on the exam paper.

* قد تظهر الأسئلة بترتيب مختلف في الامتحان الفعلي، أو على ورقة الامتحان .

** As it appears in the textbook,and LMS.

** كما وردت في كتاب الطالب وLMS .